



1085980 - R8 SDMS

COMPLETE SAMPLE DELIVERY GROUP FILE (CSF)  
EVIDENCE AUDIT CHECKLIST (EAC)  
U.S. Environmental Protection Agency  
Region 8 Superfund Program  
Contract Laboratory Program (CLP)

Route to  
Validation (Y/N) \_\_\_\_\_

Case Number: 37402

SDG Number: MH25FI

AUDIT CHECKLIST

Note: The following items are verified for each Region 8 CSF, except those indicated as "Complete Audit Only." As described in the Region 8 Inspection of Complete Sample Delivery Group SOP, the items identified as "Complete Audit Only" are completed on approximately 10% of the Region 8 CSFs. When items identified as "Complete Audit Only" are not reviewed, "N/A" is marked.

CHAIN OF CUSTODY

1. Custody Seal Present? Yes X No \_\_\_\_\_
2. Condition of Seal? Intact X Signed X Broken \_\_\_\_\_ Unsigned \_\_\_\_\_
3. Chain of Custody Record(s)/Traffic Reports Present? Yes X No \_\_\_\_\_
4. Chain of Custody Record(s)/Traffic Reports Signed? Yes X No \_\_\_\_\_
5. Chain of Custody Record(s)/Traffic Reports Dated? Yes X No \_\_\_\_\_
6. Airbill Present? Yes \_\_\_\_\_ No X
7. Airbill Number(s)? N/A
8. Airbill Signed? Yes N/A No \_\_\_\_\_
9. Airbill Dated? Yes N/A No \_\_\_\_\_
10. Sample Tags Present? Yes \_\_\_\_\_ No X
11. Sample Tags Match DC-1 (Complete Audit Only)? Yes \_\_\_\_\_ No \_\_\_\_\_ N/A X

FORM DC-1

12. Form DC-1 Present? Yes X No \_\_\_\_\_

FORM DC-2

13. Form DC-2 Present? Yes X No \_\_\_\_\_
14. Form DC-2 Reviewed by USEPA and Correct (Complete Audit Only)? Yes \_\_\_\_\_ No \_\_\_\_\_ N/A X

## DOCUMENT CONTROL

15. Laboratory Documents Legible (*Complete Audit Only*)? Yes \_\_\_\_\_ No \_\_\_\_\_ N/A X
16. Original Documents Included in CSF (*Complete Audit Only*)? Yes \_\_\_\_\_ No \_\_\_\_\_ N/A X

## DATA INSPECTION

17. Raw data present (for each analytical fraction defined by the traffic report/chain of custody record)? Yes X No \_\_\_\_\_
18. Percent Solids Form present for soil samples? Yes \_\_\_\_\_ No \_\_\_\_\_ N/A X
19. Cover Page Present? Yes X No \_\_\_\_\_
20. Records of Communication Present? Yes X No \_\_\_\_\_ N/A \_\_\_\_\_
21. Form 1s present (for each analytical fraction defined by the traffic report/chain of custody record/cover page) (*Complete Audit Only*)? Yes \_\_\_\_\_ No \_\_\_\_\_ N/A X

## ELECTRONIC DATA

22. Electronic DAT file elements received?
- |                    |              |          |           |
|--------------------|--------------|----------|-----------|
| EDD                | Yes <u>X</u> | No _____ | N/A _____ |
| CCS Report         | Yes <u>X</u> | No _____ | N/A _____ |
| M/VS Report        | Yes <u>X</u> | No _____ | N/A _____ |
| Defect Code Report | Yes <u>X</u> | No _____ | N/A _____ |

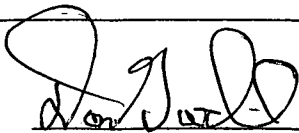
23. List RPM and contractors who received electronic DAT file:

Tetra Tech

## COMMENTS:

Laboratory indicated on the Sample Tag Information sheet that sample tags were not provided with the samples. Additionally, an Airbill was not provided to the lab along w/ the samples

Audited By:  
(As defined in the  
Region 8 Inspection of  
Complete Sample  
Delivery Group SOP)

  
Signature

Don Goodrich  
Print Name

Date: 9/16/2008



**DATA  
CHEM**  
LABORATORIES, INC.

**SDG Administrative Narrative**

Contract: EP-W-06-054  
Case: 37402  
SDG: MH25F1  
Set ID No.: 8171034

**Cooler # and temperatures of each (upon receipt)**

Cooler Number C08-	<u>NA</u>	Arrival temperature was	<u>4</u> °C
Cooler Number C08-	<u>NA</u>	Arrival temperature was	<u>9</u> °C
Cooler Number C08-		Arrival temperature was	°C
Cooler Number C08-		Arrival temperature was	°C
Cooler Number C08-		Arrival temperature was	°C
Cooler Number C08-		Arrival temperature was	°C
Cooler Number C08-		Arrival temperature was	°C
Cooler Number C08-		Arrival temperature was	°C
Cooler Number C08-		Arrival temperature was	°C

*7/7/08 mb*

**Communications:**

Any sample receiving issues with this SDG are fully documented through the email communications which are included as a portion of this SDG Narrative and immediately follow this page. Copies of each of these email communications are also located in the communication section of this datapackage. In addition, any analytical issues pertinent to a given fraction are fully documented by the analyst in the associated narrative for the applicable fraction.

**Comments:**

None.

Signature:  Date: 7/7/08

**Edwards, Meredith D.**

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**From:** Olson, Roxanne  
**Sent:** Wednesday, June 18, 2008 2:47 PM  
**To:** Edwards, Meredith D.  
**Subject:** FW: Region 08 |Case 37402 | Lab DATAC | Issue Multiple | FINAL

**Attachments:** 2008061810320025.pdf; 37402 CLP IDs.xls



200806181032002537402 CLP IDs.xls  
.pdf (642 KB) (28 KB)

-----Original Message-----

**From:** Kramer, Caroline [mailto:ckramer5@fedcsc.com]  
**Sent:** Wednesday, June 18, 2008 2:24 PM  
**To:** Olson, Roxanne  
**Cc:** beard.carol@epa.gov  
**Subject:** Region 08 |Case 37402 | Lab DATAC | Issue Multiple | FINAL

Roxy,

\*\*\*Summary Start\*\*\*

-Discrepancies with tags, jars, and/or TR/COC- Issue 1: The soil, TM and DM samples were all given the same sample ID on the TR/COC. with tags, jars, and/or TR/COC- Issue 1: The soil, TM and DM samples were all given the same sample ID on the TR/COC.

Resolution 1: Per Region 8, the laboratory will note issue in the SDG Narrative and will use the CLP sample ID provided in the attached table for the DM water and soil samples. The TM water samples will retain the CLP ID listed on the TR/COC.

-Sample listed on TR/COC but not received at laboratory- Issue 2: No sample container was received for DM for sample on TR designated MH25A4. TM container was received.

Resolution 2: Per Region 8, the laboratory will note the issue in the SDG Narrative and proceed with the analysis of the samples.

\*\*\*Summary End\*\*\*

Caroline L. Kramer  
ckramer5@fedcsc.com  
Computer Sciences Corporation (CSC)  
703.818.4248

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-----Original Message-----

**From:** Beard.Carol@epamail.epa.gov [mailto:Beard.Carol@epamail.epa.gov]  
**Sent:** Wednesday, June 18, 2008 1:17 PM  
**To:** Kramer, Caroline  
**Subject:** Re: Region 08 |Case 37402 | Lab DATAC | Issue Multiple

Caroline-

Issue 1 : Please provide the laboratory with new ID for the different matrices for Case 37402.

Issue 2 : Please have the laboratory note this in the case narrative and proceed with the analysis.

Thanks! Carol

"Kramer,  
Caroline"  
<ckramer5@fedcsc  
.com>

To  
Carol Beard/EPR/R8/USEPA/US@EPA  
cc

06/18/2008 11:06  
AM

Subject  
Region 08 |Case 37402 | Lab DATAC  
| Issue Multiple

Carol,  
DATAC is reporting the follow issues regarding Case 37402 for samples delivered today. TR/COC are attached for reference. Please advise on how the Region wishes the laboratory to proceed.

-Discrepancies with tags, jars, and/or TR/COC- Issue 1: The soil, TM and DM samples were all given the same sample ID on the TR/COC.

\*Please advise if you would like me to provide new ID for the different matrices. I can do this in a table like last time.

-Sample listed on TR/COC but not received at laboratory- Issue 2: No sample container was received for DM for sample on TR designated MH25A4.  
TM container was received.

Please let me know if you have any questions.  
Thanks,

Caroline L. Kramer  
ckramer5@fedcsc.com  
Computer Sciences Corporation (CSC)  
703.818.4248

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-----Original Message-----  
From: Olson, Roxanne [mailto:olsonr@datachem.com]  
Sent: Wednesday, June 18, 2008 12:40 PM  
To: Kramer, Caroline  
Cc: Edwards, Meredith D.  
Subject: Case 37402 Sample Delivery 6/18

Caroline: Here are the TRs for case 37402 for samples we received today and which we spoke about a few minutes ago on the phone.

Issues we see immediately:

TM, DM and Sediment samples all have same EPA IDs. Water containers labels do

differentiate between DM and TM.

No container was received for DM for sample on TR designated MH25A4. TM container was received.

How do we complete DC-1 forms?

More issues may crop up but we can't begin to address this delivery until we get the first issues taken care of.

Thanks for your help!

Roxy

(See attached file: 2008061810320025.pdf)

Listed TR ID	Matrix	Analysis	New CLP ID
MH2599	water	TM	MH2599
	water (filterd)	DM	MH2662
	soil	TM	MH2663
MH25A0	water	TM	MH25A0
	water (filterd)	DM	MH2664
	soil	TM	MH2665
MH25A1	water	TM	MH25A1
	water (filterd)	DM	MH2666
	soil	TM	MH2667
MH25A2	water	TM	MH25A2
	water (filterd)	DM	MH2668
	soil	TM	MH2669
MH25A3	water	TM	MH25A3
	water (filterd)	DM	MH2670
	soil	TM	MH2671
MH25A6	water	TM	MH25A6
	water (filterd)	DM	MH2672
MH25A7	water	TM	MH25A7
	water (filterd)	DM	MH2673
	soil	TM	MH2674
MH25A9	water	TM	MH25A9
	water (filterd)	DM	MH2675
	soil	TM	MH2676
MH25B0	water	TM	MH25B0
	water (filterd)	DM	MH2677
	soil	TM	MH2678
MH25B1	water	TM	MH25B1
	water (filterd)	DM	MH2679
	soil	TM	MH2680
MH25B2	water	TM	MH25B2
	water (filterd)	DM	MH2681
	soil	TM	MH2682
MH25B3	water	TM	MH25B3
	water (filterd)	DM	MH2683
	soil	TM	MH2684
MH25B4	water	TM	MH25B4
	water (filterd)	DM	MH2685
MH25B5	water	TM	MH25B5
	water (filterd)	DM	MH2686
	soil	TM	MH2687
MH25B6	water	TM	MH25B6
	water (filterd)	DM	MH2688
	soil	TM	MH2689
MH25B7	water	TM	MH25B7
	water (filterd)	DM	MH2690
	soil	TM	MH2691

MH25B8	water	TM	MH25B8
	water (filterd)	DM	MH2692
	soil	TM	MH2693
MH25C0	water	TM	MH25C0
	water (filterd)	DM	MH2694
	soil	TM	MH9695
MH25C4	water	TM	MH25C4
	water (filterd)	DM	MH2696
MH25C5	water	TM	MH25C5
	water (filterd)	DM	MH2697
	soil	TM	MH2698
MH25C7	water	TM	MH25C7
	water (filterd)	DM	MH2699
	soil	TM	MH26A0
MH25C8	water	TM	MH25C8
	water (filterd)	DM	MH26A1
	soil	TM	MH26A2
MH25C9	water	TM	MH25C9
	water (filterd)	DM	MH26A3
MH25D1	water	TM	MH25D1
	water (filterd)	DM	MH26A4
	soil	TM	MH26A5
MH25D3	water	TM	MH25D3
	water (filterd)	DM	MH26A6
MH25D4	water	TM	MH25D4
	water (filterd)	DM	MH26A7
	soil	TM	MH26A8
MH25D5	water	TM	MH25D5
	water (filterd)	DM	MH26A9
	soil	TM	MH26B0
MH25D6	water	TM	MH25D6
	water (filterd)	DM	MH26B1
MH25D7	water	TM	MH25D7
	water (filterd)	DM	MH26B2
	soil	TM	MH26B3
MH25D8	water	TM	MH25D8
	water (filterd)	DM	MH25B4
MH25D9	water	TM	MH25D9
	water (filterd)	DM	MH26B5
MH25E0	water	TM	MH25E0
	water (filterd)	DM	MH26B6
MH25E1	water	TM	MH25E1
	water (filterd)	DM	MH26B7
MH25E2	water	TM	MH25E2
	water (filterd)	DM	MH26B8
MH25E3	water	TM	MH25E3
	water (filterd)	DM	MH26B9



MH25E4	water	TM	MH25E4
	water (filterd)	DM	MH26C0
	soil	TM	MH26C1
MH25E5	water	TM	MH25E5
	water (filterd)	DM	MH26C2
	soil	TM	MH26C3
MH25E6	water	TM	MH25E6
	water (filterd)	DM	MH26C4
	soil	TM	MH26C5
MH25E7	water	TM	MH25E7
	water (filterd)	DM	MH26C6
	soil	TM	MH26C7
MH25E8	water	TM	MH25E8
	water (filterd)	DM	MH26C8
	soil	TM	MH26C9
MH25E9	water	TM	MH25E9
	water (filterd)	DM	MH26D0
MH25F0	water	TM	MH25F0
	water (filterd)	DM	MH26D1

**Edwards, Meredith D.**

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**From:** Olson, Roxanne  
**Sent:** Friday, June 20, 2008 9:54 AM  
**To:** Edwards, Meredith D.  
**Subject:** FW: Region 08 |Case 37402 | Lab DATAC | Issue Insufficient volume | FINAL

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**From:** Kramer, Caroline [mailto:ckramer5@fedcsc.com]  
**Sent:** Friday, June 20, 2008 9:46 AM  
**To:** Olson, Roxanne  
**Cc:** beard.carol@epa.gov  
**Subject:** Region 08 |Case 37402 | Lab DATAC | Issue Insufficient volume | FINAL

Roxy,

\*\*\*Summary Start\*\*\*

Issue: There were no samples designated on the TR/COC for laboratory QC and lab QC is required per scheduling. The laboratory is unable to perform a reduced volume QC on the waters as the samplers delivered the samples in 500 mL bottles instead of the 1000 mL recommended in the SOW. Below is a list of the SDG for Case 37402 and the laboratory has indicated which SDG will not have sufficient volume for QC, and where possible selected a sample they would like to use for QC.

MH2599 (TM water) no QC selected as there is not enough volume.

MH25C5 (TM water) no QC selected as there is not enough volume.

MH25E8 (TM water) no QC selected as there is not enough volume.

MH2662 (DM water) no QC selected as there is not enough volume.

MH2697 (DM water) no QC selected as there is not enough volume.

MH26C8 (DM water) no QC selected as there is not enough volume.

MH25F1 (TM soil) selected MH26C9 for QC.

MH2663 (TM soil) selected MH2695 for QC

Resolution: Per Region 8, the laboratory's selection of soil QC samples is acceptable. The laboratory will note the volume insufficiency in the SDG Narrative, cancel lab QC on the TM and DM SDG and proceed with the analysis of the samples.

\*\*\*Summary End\*\*\*

Please let me know if you have any questions or problems.

Thank you,

*Caroline L. Kramer*

ckramer5@fedcsc.com

Computer Sciences Corporation (CSC)

703.818.4248

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→ 6/20/2008 Phone conversation between Caroline Kramer, SMO, and Carol Beard, Region 8. Carol confirmed that the soil samples selected for QC are acceptable and that DATAC can cancel the QC for the water samples due to insufficient sample volume. The laboratory will note the issue in the SDG Narrative.

**From:** Kramer, Caroline

6/20/2008

**Sent:** Thursday, June 19, 2008 3:21 PM  
**To:** 'beard.carol@epa.gov'  
**Subject:** Region 08 | Case 37402 | Lab DATAC | Issue Insufficient volume

Carol,  
DATAC is reporting the following issue regarding Case 37402. Please advise on how the Region wishes the laboratory to proceed.

Issue: There were no samples designated on the TR/COC for laboratory QC and lab QC is required per scheduling. The laboratory is unable to perform a reduced volume QC on the waters as the samplers delivered the samples in 500 mL bottles instead of the 1000 mL recommended in the SOW. Below is a list of the SDG for Case 37402 and the laboratory has indicated which SDG will not have sufficient volume for QC, and where possible selected a sample they would like to use for QC.

MH2599 (TM water) no QC selected as there is not enough volume.  
MH25C5 (TM water) no QC selected as there is not enough volume.  
MH25E8 (TM water) no QC selected as there is not enough volume.  
MH2662 (DM water) no QC selected as there is not enough volume.  
MH2697 (DM water) no QC selected as there is not enough volume.  
MH26C8 (DM water) no QC selected as there is not enough volume.  
MH25F1 (TM soil) selected MH26C9 for QC.  
MH2663 (TM soil) selected MH2695 for QC

Please let me know if you have any questions or problems.  
Thank you,

Caroline L. Kramer  
ckramer5@fedcsc.com  
Computer Sciences Corporation (CSC)  
703.818.4248

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**From:** Olson, Roxanne [mailto:[olsonr@datachem.com](mailto:olsonr@datachem.com)]  
**Sent:** Thursday, June 19, 2008 3:04 PM  
**To:** Kramer, Caroline  
**Subject:** FW: Region 8 Case 37402

Caroline: See the following for the SDGs and where possible DATAC's selection for QC. Please note that because this was a confusing login effort we have one SDG (MH2663) that we did not use the lowest alpha numeric number to name the SDG.

Roxy

---

**From:** Edwards, Meredith D.  
**Sent:** Thursday, June 19, 2008 12:57 PM  
**To:** DataChem EPA List  
**Subject:** Region 8 Case 37402

Here are the SDG names and then the samples I chose for QC.

6/20/2008

MH2599 TM water no QC selected as there is not enough volume.

MH25C5 TM water no QC selected as there is not enough volume.

MH25E8 TM water no QC selected as there is not enough volume.

MH2662 DM water no QC selected as there is not enough volume.

MH2697 DM water no QC selected as there is not enough volume.

MH26C8 DM water no QC selected as there is not enough volume.

MH25F1 TM soil selected MH26C9 for QC.

MH2663 TM soil selected MH2695 for QC also on this SDG I used a higher number to name the SDG. Since there were only 2 samples that didn't change names after receipt it was very confusing.

Thanks

Mere

-----Original Message-----

From: Kramer, Caroline

Sent: Thursday, June 19, 2008 10:47 AM

To: 'Olson, Roxanne'

Subject: RE: Region 08 | Case 37402 | Lab DATAC | Issue Multiple | FINAL

Roxy,

Just let me know as soon as you know which SDG will not have sufficient volume and I will pass it along to the Region for a resolution.

Please let me know if you have any confusion with the spreadsheet of new sample IDs as you are logging them in.

Thanks,

Caroline L. Kramer

ckramer5@fedcsc.com

Computer Sciences Corporation (CSC)

703.818.4248

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-----Original Message-----

From: Olson, Roxanne [mailto:olsonr@datachem.com]

Sent: Thursday, June 19, 2008 10:38 AM

To: Kramer, Caroline

Subject: FW: Region 08 | Case 37402 | Lab DATAC | Issue Multiple | FINAL

Caroline: Another issue with the samples from yesterday as we were logging them in. We have no extra volume for the water samples for QC. Is the case closed or should we expect additional volume from another delivery? We can't even do a reduced volume on the waters as the samplers are delivering the samples in 500 mL bottles instead of the 1000 mL recommended in the SOW. I will let you know which SDGs will not have QC as soon as we complete the login.

6/20/2008

**Roxy**

6/21/2008

USEPA - CLP  
COVER PAGE

Lab Name: DATAChem LABORATORIES

Contract: EP-W-06-054

Lab Code: DATAc

Case No.: 37402

NRAS No.: 1553.0

SDG No.: MH25F1

SOW No.: ILM05.4

EPA Sample No.

Lab Sample ID

MH25F1

8171034001

MH2698

8171034002

MH26A0

8171034003

MH26A2

8171034004

MH26A5

8171034005

MH26A8

8171034006

MH26B0

8171034007

MH26B3

8171034008

MH26C1

8171034009

MH26C3

8171034010

MH26C5

8171034011

MH26C7

8171034012

MH26C9

8171034013

MH26C9D

8171034015

MH26C9S

8171034014

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	ICP-AES	ICP-MS
Were ICP-AES and ICP-MS Interelement corrections applied?	(Yes/No) <u>YES</u>	<u>NO</u>
Were ICP-AES and ICP-MS background corrections applied?	(Yes/No) <u>YES</u>	<u>NO</u>
If yes - were raw data generated before application of background corrections?	(Yes/No) <u>NO</u>	<u>NO</u>

Comments:

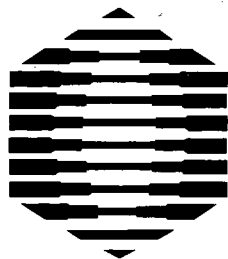
I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette (or via an alternate means of electronic transmission, if approved in advance by USEPA) has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Neil Edwards

Name: Neil Edwards

Date: 07/07/2008

Title: Chemist



**DATA  
CHEM**  
LABORATORIES, INC.

## SDG NARRATIVE

Case #: 37402  
SDG#: MH25F1  
Contract #: EP-W-06-054  
DCL Set ID#: 8171034  
July 7, 2008

### General Information

The thirteen samples in this SDG were analyzed by methodologies contained in ILM05.4, by MOD # 1553.0. All concentration, analytical, and method qualifiers are defined in the SOW.

### Holding Times

All samples were prepared and analyzed within method required holding times.

### Initial and Continuing Calibration

All initial and continuing calibration verification and blank analyses were performed within the designated frequency and recoveries of the verifications and concentrations of the blanks met method acceptance criteria.

### Interference Check Sample Analysis

Results for the interference check samples met method acceptance criteria.

### Preparation Blanks

The absolute values of all analyte concentrations in the preparation blanks were lower than the Contract Required Quantitation Limits.

### Laboratory Control Sample Analysis

Results for the analysis of the LCS met method acceptance criteria.

### Matrix Spike Analysis

All matrix spike recoveries were within the limits of 75-125%

### Matrix Duplicate Analysis

All matrix duplicate results met method criteria.

### Serial Dilution

ICP-AES Serial Dilution results met method acceptance criteria.

### Miscellaneous Comments

All calibration data is linear, please see raw data.  
Cooler temps were at 4 and 9 °C at time of receipt.

### Example Equations

Method MW1:  $C \times \frac{V_f}{V_i} \times DF = \text{Concentration}(\mu\text{g/L})$

Where,

C = Instrument value in  $\mu\text{g/L}$  (The average of all replicate integrations).

Vf= Final digestion volume (mL)

Vi= Initial digestion volume (mL)

DF = Dilution Factor



# SAMPLE LOG-IN SHEET

mt 1553.0

Lab Name DataChem Laboratories, Inc. Page 1 of 1

Received By (Print Name) Meredith Edwards Log-In Date 6/19/08

Received By (Signature) Meredith Edwards

Case Number 37402 Sample Delivery Group No. MH25FI NRAS Number n/a

Remarks:	EPA Sample #	Aqueous Sample pH	Corresponding		Remarks: Condition of Sample Shipment, etc.
			Sample Tag #	Assigned Lab #	
1. Custody Seal (a) Present/Absent* <u>Present</u> Intact/Broken*	<u>MH 25 A7</u>	<u>4.2</u>			<u>TM water</u>
	<u>A9</u>				
2. Custody Seal Nos. <u>n/a</u>	<u>B0</u>				
	<u>B1</u>				
3. Traffic Reports/Chain of Custody Records or Packing Lists <u>Present/Absent*</u>	<u>B4</u>				
4. Airbill Airbill/Sticker Present/Absent* <u>Present</u>	<u>B5</u>				
	<u>B6</u>				
5. Airbill No. <u>n/a</u>	<u>D9</u>				
	<u>E8</u>				
6. Sample Tags Present/Absent* <u>Present</u> Sample Tag Numbers <u>Not Listed on Chain-of-Custody</u>	<u>F1</u>	<u>n/a</u>		<u>877 1034001</u>	<u>Metals Soil</u>
	<u>MH 26 B3</u>	<u>4.2</u>			<u>TM water</u>
7. Sample Condition Intact/Broken*/Leaking* <u>Intact</u>	<u>75</u>				
8. Cooler Temperature Indicator Bottle Present/Absent* <u>Present</u>	<u>77</u>				
9. Cooler Temperature <u>4</u>	<u>79</u>				
10. Does information on custody records, traffic reports, and sample tags agree? <u>Yes/No*</u>	<u>85</u>				
11. Date Received at lab <u>6/18/08</u>	<u>86</u>				
12. Time Received <u>8:15</u>	<u>92</u>				
Sample Transfer	<u>B5</u>				
Fraction <u>TM/DM</u>	<u>C8</u>				
Area # <u>P. 221</u>					
By <u>ME</u>					
On <u>6/15/08</u>					

\* Contact SMO and attach record of resolution

Reviewed By [Signature] Logbook No. NOT APPLICABLE

Date: 6/19/08 Logbook Page No. NOT APPLICABLE 4

# SAMPLE LOG-IN SHEET

Mod 1553.0

Lab Name DataChem Laboratories, Inc.		Page 1 of 2	
Received By (Print Name) Meredith Edwards		Log-In Date 6/19/08	
Received By (Signature) Meredith Edwards			
Case Number 37402		Sample Delivery Group No. MH25F1	
NRAS Number N/A			
Remarks:		Remarks: Condition of Sample Shipment, etc.	
EPA Sample #		Aqueous Sample pH	
Corresponding		Sample Tag #	
Assigned Lab #			
1. Custody Seal(s) Present/Absent* Intact/Broken*		MH 216 D2 N/A	
2. Custody Seal Nos. N/A 1		MH 25 A5 N/A	
3. Traffic Reports/ Chain of Custody Records or Packing Lists Present/Absent*		MH 216 3 N/A	
4. Airbill Airbill/Sticker Present/Absent*		65 N/A	
5. Airbill No. N/A 1		67 N/A	
6. Sample Tags Present/Absent*		69 N/A	
Sample Tag Numbers Listed/Not Listed on Chain-of-Custody		71 N/A	
7. Sample Condition Intact/Broken*/ Leaking*		74 N/A	
8. Cooler Temperature Indicator Bottle Present/Absent*		76 N/A	
9. Cooler Temperature 9.		78 N/A	
10. Does information on custody records, traffic reports, and sample tags agree? Yes/No*		80 N/A	
11. Date Received at lab 6/19/08		82 N/A	
12. Time Received 8:15		84 N/A	
Sample Transfer		85 N/A	
Fraction Metals		87 N/A	
Area # 153.1		88 N/A	
By AC		89 N/A	
On 6/19/08		90 N/A	
Area #		91 N/A	
By		93 N/A	
On		95 N/A	
* Contact SMO and attach record of resolution		97 N/A	
Reviewed By C. O'Brien		98 N/A	
Date: 6/19/08		99 N/A	
Logbook No. NOT APPLICABLE		100 N/A	
Logbook Page No. NOT APPLICABLE		5	

# SAMPLE LOG-IN SHEET

MOD 1553.0

Lab Name <b>DataChem Laboratories, Inc.</b>		Page <u>2</u> of <u>2</u>	
Received By (Print Name) <i>Meredith Edwards</i>		Log-In Date <i>6/19/08</i>	
Received By (Signature) <i>Meredith Edwards</i>			
Case Number <i>37402</i>		Sample Delivery Group No. <i>NAH 25F1</i>	NRAS Number <i>n/a</i>

Remarks:	- EPA Sample #	Aqueous Sample pH	Corresponding		Remarks: Condition of Sample Shipment, etc.
			Sample Tag #	Assigned Lab #	
1. Custody Seal (s) Present/Absent* Intact/Broken*	<i>NAH 210A7</i>	<i>n/a</i>	<i>n/a</i>	<i>87H034006</i>	<i>Metal Soil</i>
2. Custody Seal Nos. <i>n/a</i>	<i>B0</i>			<i>007</i>	
	<i>B3</i>			<i>008</i>	
	<i>C1</i>			<i>009</i>	
3. Traffic Reports/Chain of Custody Records or Packing Lists Present/Absent*	<i>C3</i>			<i>010</i>	
4. Airbill Airbill/Sticker Present/Absent*	<i>C5</i>			<i>011</i>	
	<i>C7</i>			<i>012</i>	
5. Airbill No. <i>n/a</i>	<i>C9</i>			<i>013, 014, 015</i>	<i>MS/PO</i>
6. Sample Tags Present/Absent*					
Sample Tag Numbers Listed/Not Listed on Chain-of-Custody					
7. Sample Condition Intact/Broken*/Leaking*					
8. Cooler Temperature Indicator Bottle Present/Absent*					
9. Cooler Temperature <i>9°</i>					
10. Does information on custody records, traffic reports, and sample tags agree? Yes/No*					
11. Date Received at lab <i>6/19/08</i>					
12. Time Received <i>815</i>					
Sample Transfer					
Fraction <i>Metal</i>	Fraction				
Area # <i>2331</i>	Area #				
By <i>ME</i>	By				
On <i>6/18/08</i>	On				

Reviewed By <i>Johnnie Olsen</i>		Logbook No. NOT APPLICABLE	
Date: <i>6/19/08</i>		Logbook Page No. NOT APPLICABLE <span style="float: right;">6</span>	

**FULL INORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET**

LABORATORY NAME	DataChem Laboratories, Inc.		
CITY/STATE	Salt Lake City, UT 84123		
CASE NO.	37402	SDG NO.:	MH25F1
SDG NOS. TO FOLLOW	N/A		
NRAS No.	N/A		
CONTRACT NO.	EP-W-06-054		
SOW NO.	ILM05.4		

All documents delivered in the Complete SDG File must be original documents where possible.  
(Reference - Exhibit B Section 2.6)

	PAGE NOS		CHECK	
	FROM	TO	LAB	REGION
1. Cover Page	<u>1</u>	<u>1</u>	✓	
2. SDG Narrative	<u>2</u>	<u>3</u>	✓	
3. Sample Log-In Sheet (DC-1)	<u>4</u>	<u>6</u>	✓	
4. Inventory Sheet (DC-2)	<u>7</u>	<u>8</u>	✓	
5. Traffic Report/Chain of Custody Record(s)	<u>9</u>	<u>11</u>	✓	
<b>Inorganic Analysis</b>				
6. Data Sheet (Form I-IN)	<u>12</u>	<u>24</u>	✓	
7. Initial & Continuing Calibration Verification (Form IIA-IN)	<u>25</u>	<u>26</u>	✓	
8. CRQL Standard (Form IIB-IN)	<u>27</u>	<u>28</u>	✓	
9. Blanks (Form III-IN)	<u>29</u>	<u>30</u>	✓	
10. ICP-AES Interference Check Sample (Form IVA-IN)	<u>31</u>	<u>34</u>	✓	
11. ICP-MS Interference Check Sample (Form IVB-IN)	<u>N/A</u>		✓	
12. Matrix Spike Sample Recovery (Form VA-IN)	<u>35</u>	<u>35</u>	✓	
13. Post-Digestion Spike Sample Recovery (Form VB-IN)	<u>NA</u>		✓	
14. Duplicates (Form VI-IN)	<u>36</u>	<u>36</u>	✓	
15. Laboratory Control Sample (Form VII-IN)	<u>37</u>	<u>37</u>	✓	
16. ICP-AES and ICP-MS Serial Dilutions (Form VIII-IN)	<u>38</u>	<u>38</u>	✓	
17. Method Detection Limits (Annually) (Form IX-IN)	<u>39</u>	<u>40</u>	✓	
18. ICP-AES Interelement Correction Factors (Quarterly) Form XA-IN)	<u>41</u>	<u>41</u>	✓	
19. ICP-AES Interelement Correction Factors (Quarterly) Form XB-IN)	<u>42</u>	<u>43</u>	✓	
20. ICP-AES and ICP-MS Linear Ranges (Quarterly) Form XI-IN)	<u>44</u>	<u>44</u>	✓	
21. Preparation Log (Form XII-IN)	<u>45</u>	<u>45</u>	✓	

# FULL INORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET

	PAGE NOS		CHECK	
	FROM	TO	LAB	REGION
22. Analysis Run Log (Form XIII-IN)	46	47	✓	
23. ICP-MS Tune (Form XIV-IN)	NA		✓	
24. ICP-MS Internal Standards Relative Intensity Summary (Form XV-IN)	NA		✓	
25. ICP AES Raw Data	48	110	✓	
26. GFAA Raw Data (If Applicable)	NA		✓	
27. ICP-MS Raw Data	NA		✓	
28. Mercury Raw Dta	NA		✓	
29. Cyanide Raw Data	NA		✓	
30. Preparation Logs Raw Data	111	111	✓	
31. Percent Solids Determination Log	NA		✓	
32. USEPA Shipping/Receiving Documents				
Airbill (No. of Shipments _____)	NA		✓	
Sample Tags	112	112	✓	
Sample Log-In Sheet (Lab)	NA		✓	
33. Misc. Shipping/Receiving Records				
(list all individual records)				
Telephone Logs	NA		✓	
DCL CRIR	NA		✓	
DCL SDG TR Cover Sheet	113	113	✓	
34. Internal Lab Sample Transfer Records and Tracking Sheets (describe or list)				
DCL Work Order	NA		✓	
DCL COC	114	115	✓	
35. Internal Original Sample Prep & Analysis Records (describe or list)				
Prep Records	116	125	✓	
Analysis Records	126	149	✓	
Description	NA		✓	
36. Other Records (describe or list)				
Telephone Communications Log	NA		✓	
E-mail Communications	150	159	✓	
37. Comments:				

Completed by:  
(CLP Lab)

(Signature)

Melissa Duggan / Doc. Ctrl.  
(Print Name & Title)

7/7/08  
(Date)

Audited By:  
(USEPA)

(Signature)

(Print Name & Title)

8  
(Date)



USEPA Contract Laboratory Program  
Inorganic Traffic Report & Chain of Custody Record



8171034

Case No: 37402

DAS No:

SDG No:

MH25F1

L

Date Shipped: 6/16/2008 Carrier Name: Hand delivered Airbill: Shipped to: Datachem Laboratories, Inc. 960 West LeVoy Drive Salt Lake City UT 84123 (801) 266-7700	<b>Chain of Custody Record</b>		Sampler Signature: <i>Ch H</i>	<b>For Lab Use Only</b> Lab Contract No: <i>EPMD 00051</i> Unit Price: <i>N/A</i> Transfer To: <i>10/16/08</i> Lab Contract No: Unit Price:
	Relinquished By (Date / Time)	Received By (Date / Time)		
	1 <i>Ch H</i> 6/18/08	<i>Meredith Jones</i> 6/18/08 / 9:55		
	2			
	3			
4				

INORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No/ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME	ORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt
MH25C5	Surface Water/ Sediment	/G	DM (21), TM (21)	91, 92, 93 (3)	Silver Creek upstream of Dority Springs	S: 6/5/2008 10:20		
<del>MH25C6</del>	<del>Surface Water/ Sediment</del>	<del>/G</del>	<del>DM (21), TM (21)</del>	<del>94, 95, 96 (3)</del>	<del>Silver Creek below Prospector Square</del>			
MH25C7	Surface Water/ Sediment	/G	DM (21), TM (21)	97, 98, 99 (3)	Silver Creek above Prospector Square	S: 6/5/2008 10:50		
MH25C8	Surface Water/ Sediment	/G	DM (21), TM (21)	100, 101, 102 (3)	Silver Creek downstream of Ontario Canyon	S: 6/5/2008 12:55		
MH25C9	Surface Water	/G	DM (21), TM (21)	103, 104, 105 (3) (2)	Silver Creek above Ontario Canyon	S: 6/5/2008 13:20		
<del>MH25D0</del>	<del>Surface Water</del>	<del>/G</del>	<del>DM (21), TM (21)</del>	<del>106, 107, 108 (3)</del>	<del>Ontario Canyon above Silver Creek</del>			
MH25D1	Surface Water/ Sediment	/G	DM (21), TM (21)	109, 110, 111 (3)	Ontario Canyon below Ontario Drain Tunnel 2	S: 6/5/2008 14:50		
<del>MH25D2</del>	<del>Surface Water</del>	<del>/G</del>	<del>DM (21), TM (21)</del>	<del>112, 113, 114 (3)</del>	<del>Mouth of Ontario Drain Tunnel</del>			
MH25D3	Surface Water	/G	DM (21), TM (21)	115, 116, 117 (3) (2)	Ontario Canyon above Empire Canyon	S: 6/5/2008 14:00		
MH25D4	Surface Water/ Sediment	/G	DM (21), TM (21)	118, 119, 120 (3)	Mouth of Empire Canyon	S: 6/5/2008 15:00		

Shipment for Case Complete? <i>6</i>	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt: <i>4/4/4/4/4</i>	Chain of Custody Seal Number:
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Custody Seal Intact? <i>N</i>	Shipment Iced? <i>U</i>
DM = CLP TAL Dissolved Metals, TM = CLP TAL Total Metals				

TR Number: 8-584325316-061608-0001

PR provides preliminary results. Requests for preliminary results will increase analytical costs.  
Send Copy to: Sample Management Office, 15000 Conference Center Dr., Chantilly, VA. 20151-3819 Phone 703/818-4200; Fax 703/818-4602

LABORATORY COPY



USEPA Contract Laboratory Program  
Inorganic Traffic Report & Chain of Custody Record

Case No: 37402

DAS No:

SDG No: MH25FI

L

Date Shipped: 6/16/2008  
Carrier Name: Hand delivered  
Airbill:  
Shipped to: Datachem Laboratories,  
Inc.  
960 West LeVoy Drive  
Salt Lake City UT 84123  
(801) 266-7700

Chain of Custody Record

Relinquished By (Date / Time)

1 *Ch H*

2

3

4

Sampler  
Signature: *Ch H*

Received By (Date / Time)

*Mona Lisa 4/5/08/8:15*

For Lab Use Only

Lab Contract No: *ENDPOINT*

Unit Price: *110*

Transfer To: *Ch H*

Lab Contract No:

Unit Price:

INORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No/ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME	ORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt
MH25D5	Surface Water/ Sediment	/G	DM (21), TM (21)	121, 122, 123 (3)	Mouth of Walker & Webster Gulch	S: 6/6/2008 11:00		
MH25D6	Surface Water	/G	DM (21), TM (21)	<del>124, 125, 126 (3)</del> (2)	Mouth of Anchor Tunnel	S: 6/6/2008 9:50		
MH25D7	Surface Water/ Sediment	/G	DM (21), TM (21)	127, 128, 129 (3)	Upstream of Anchor Tunnel	S: 6/6/2008 10:30		
MH25D8	Ground Water	/G	DM (21), TM (21)	130, 131 (2)	Transect 1	S: 6/4/2008 18:55		
MH25D9	Ground Water	/G	DM (21), TM (21)	132, 133 (2)	Transect 2	S: 6/4/2008 17:43		
MH25E0	Ground Water	/G	DM (21), TM (21)	134, 135 (2)	Transect 3	S: 6/4/2008 17:08		
MH25E1	Ground Water	/G	DM (21), TM (21)	136, 137 (2)	Transect 5	S: 6/3/2008 15:00		
MH25E2	Ground Water	/G	DM (21), TM (21)	138, 139 (2)	Transect 6	S: 6/3/2008 12:55		
MH25E3	Ground Water	/G	DM (21), TM (21)	140, 141 (2)	P2-5	S: 6/3/2008 10:57		
MH25E4	Surface Water/ Sediment	/G	DM (21), TM (21)	142, 143, 144 (3)	SC-SW-33	S: 6/5/2008 10:54		

Shipment for Case Complete? <input checked="" type="checkbox"/>	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt: <i>4/4/4/4/4</i>	Chain of Custody Seal Number:
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Custody Seal Intact? <input checked="" type="checkbox"/>	Shipment Iced? <input checked="" type="checkbox"/>

DM = CLP TAL Dissolved Metals, TM = CLP TAL Total Metals

TR Number: 8-584325316-061608-0001

PR provides preliminary results. Requests for preliminary results will increase analytical costs.  
Send Copy to: Sample Management Office, 15000 Conference Center Dr., Chantilly, VA. 20151-3819 Phone 703/818-4200; Fax 703/818-4602

LABORATORY COPY

F2V



USEPA Contract Laboratory Program  
Inorganic Traffic Report & Chain of Custody Record

Case No: 37402

DAS No:

SDG No: MH25F1

L

Date Shipped: 6/16/2008 Carrier Name: Hand delivered Airbill: Shipped to: Datachem Laboratories, Inc. 960 West LeVoy Drive Salt Lake City UT 84123 (801) 266-7700	<b>Chain of Custody Record</b>		<b>For Lab Use Only</b>
	Relinquished By	(Date / Time)	Sampler Signature: <i>[Signature]</i>
	1 <i>[Signature]</i>	6/18/08	Received By <i>[Signature]</i>
	2		(Date / Time)
	3		
4			
Lab Contract No: <i>[Signature]</i>		Unit Price: <i>[Signature]</i>	Transfer To: <i>[Signature]</i>
Lab Contract No:		Unit Price:	

INORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME	ORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt
MH25E5	Surface Water/ Sediment	/G	DM (21), TM (21)	145, 146, 147 (3)	SC-SW-40-1	S: 6/5/2008 14:30		
MH25E6	Surface Water/ Sediment	/G	DM (21), TM (21)	148, 149, 150 (3)	SC-SW-40-1	S: 6/5/2008 14:37		
MH25E7	Surface Water/ Sediment	/G	DM (21), TM (21)	151, 152, 153 (3)	SC-SW-43	S: 6/6/2008 10:34		
MH25E8	Surface Water/ Sediment	/G	DM (21), TM (21)	154, 155, 156 (3)	SC-SW-44	S: 6/5/2008 18:45		
MH25E9	Surface Water	/G	DM (21), TM (21)	<del>157, 158, 159 (3)</del> (2)	SC-SW-OPP1	S: 6/5/2008 8:07		
MH25F0	Surface Water	/G	DM (21), TM (21)	<del>160, 161, 162 (3)</del> (2)	SC-SW-OPP2	S: 6/5/2008 15:40		
MH25F1	Sediment		<del>TM (21)</del> (1)		SC-SW-20			

Shipment for Case Complete? <input checked="" type="checkbox"/>	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt: 4/4/4/4/4	Chain of Custody Seal Number:
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Custody Seal Intact? <input checked="" type="checkbox"/>	Shipment Iced? <input checked="" type="checkbox"/>
DM = CLP TAL Dissolved Metals, TM = CLP TAL Total Metals				

TR Number: 8-584325316-061608-0001

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

Send Copy to: Sample Management Office, 15000 Conference Center Dr., Chantilly, VA. 20151-3819 Phone 703/818-4200; Fax 703/818-4602

LABORATORY COPY



**TARGET SHEET**  
**EPA REGION VIII**  
**SUPERFUND DOCUMENT MANAGEMENT SYSTEM**

**DOCUMENT NUMBER:** 1085980

**SITE NAME:** RICHARDSON FLAT TAILINGS

**DOCUMENT DATE:** 09/11/2008

**DOCUMENT NOT SCANNED**

Due to one of the following reasons:

- ☐ PHOTOGRAPHS
- ☐ 3-DIMENSIONAL
- ☐ OVERSIZED
- ☐ AUDIO/VISUAL
- ☐ PERMANENTLY BOUND DOCUMENTS
- ☐ POOR LEGIBILITY
- ☒ OTHER
- ☐ NOT AVAILABLE
- ☐ TYPES OF DOCUMENTS NOT TO BE SCANNED  
(Data Packages, Data Validation, Sampling Data, CBI, Chain of Custody)

**DOCUMENT DESCRIPTION:**

1 - 3 1/2" Floppy - File Name MH25F1.IO1, Contract #EP-W-06-054,  
Case/SDG 37402/MH25F1, 7/7/08